

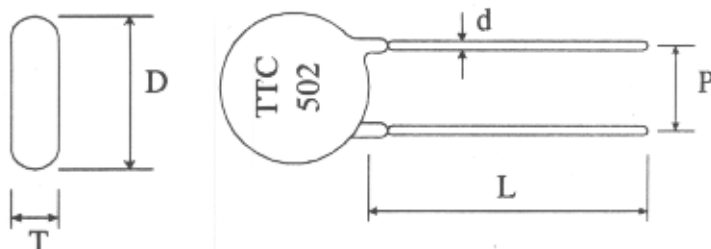
142068

Specification of NTC Thermistor for Temperature Compensation

PART NO . TTC-502

CUSTOMER P/N . _____

1. Dimensions



Disc ϕ	Dmax.	Lmin.	d	p	Tmax.
5	6.5	31	0.5 ± 0.02	3.5 ± 0.5	5

(Unit : mm)

1-1 Material of coating : EPOXY

1-2 Material of Leads : Tinned Copper Wires

1-3 Color of coating : Green

2. Electrical characteristics

	Parameter	Symbol	Test Conditions	Min.	Nor.	Max.	Unit.
a.	Resistance At 25°C	R_{25}	$T_a = 25^\circ\text{C} \pm 0.1^\circ\text{C}$ $I < 0.5\text{mA}$	4.5	5	5.5	KOHM
b.	Resistance At 50°C	R_{50}	$T_a = 50^\circ\text{C} \pm 0.1^\circ\text{C}$ $I < 0.5\text{mA}$	-----	1.794	-----	KOHM
c.	R_{25} / R_{50}	K	-----	-----	2.786	-----	-----
d.	B Constant	B	(8876 Log K)	3673	3950	4226	K
e.	Thermal Dissipation Constant	C	$T_a = 25^\circ\text{C} \pm 0.1^\circ\text{C}$	-----	9	-----	mW/°C
f.	Thermal Time Constant	-----	$T_a = 25^\circ\text{C} \pm 0.1^\circ\text{C}$	-----	21	-----	Sec
g.	Insulation Test	-----	1000V DC 1 min	-----	500	-----	Mohm

3. Maximun Ratings

	Parameter	Specification	Unit
a.	Operation Temperature Range	-30 ----- +125	°C
b.	Max' Permissible Current	30	mA
c.	Max' Operating Current	3	mA

4. Mechanical Characteristics

4-1 Leads Terminal Tensile Strength

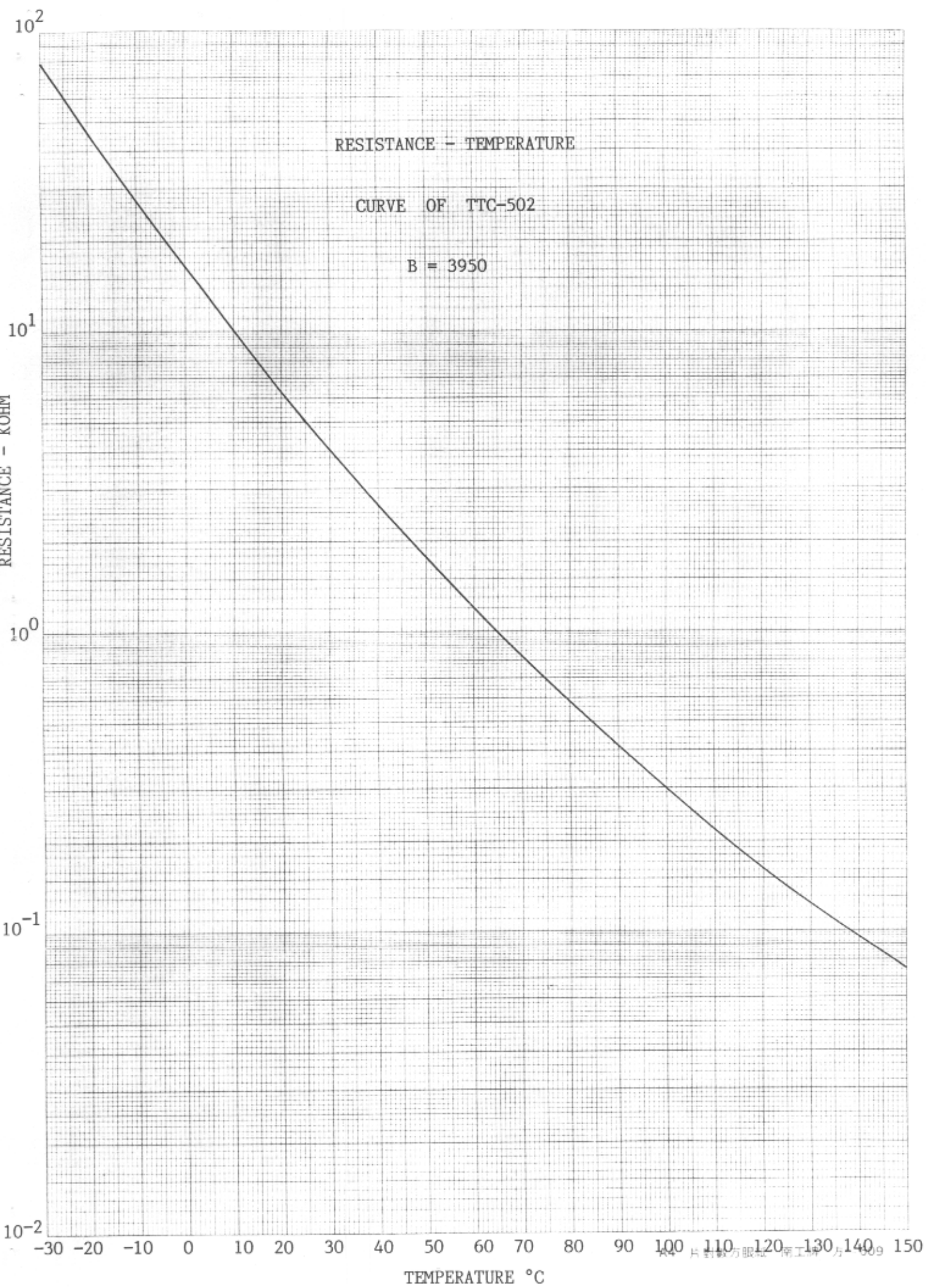
Conditions	Test Result	
Fasten body with a Load Applied to each lead 1 kg for 5 sec.	No break out and damage	OK

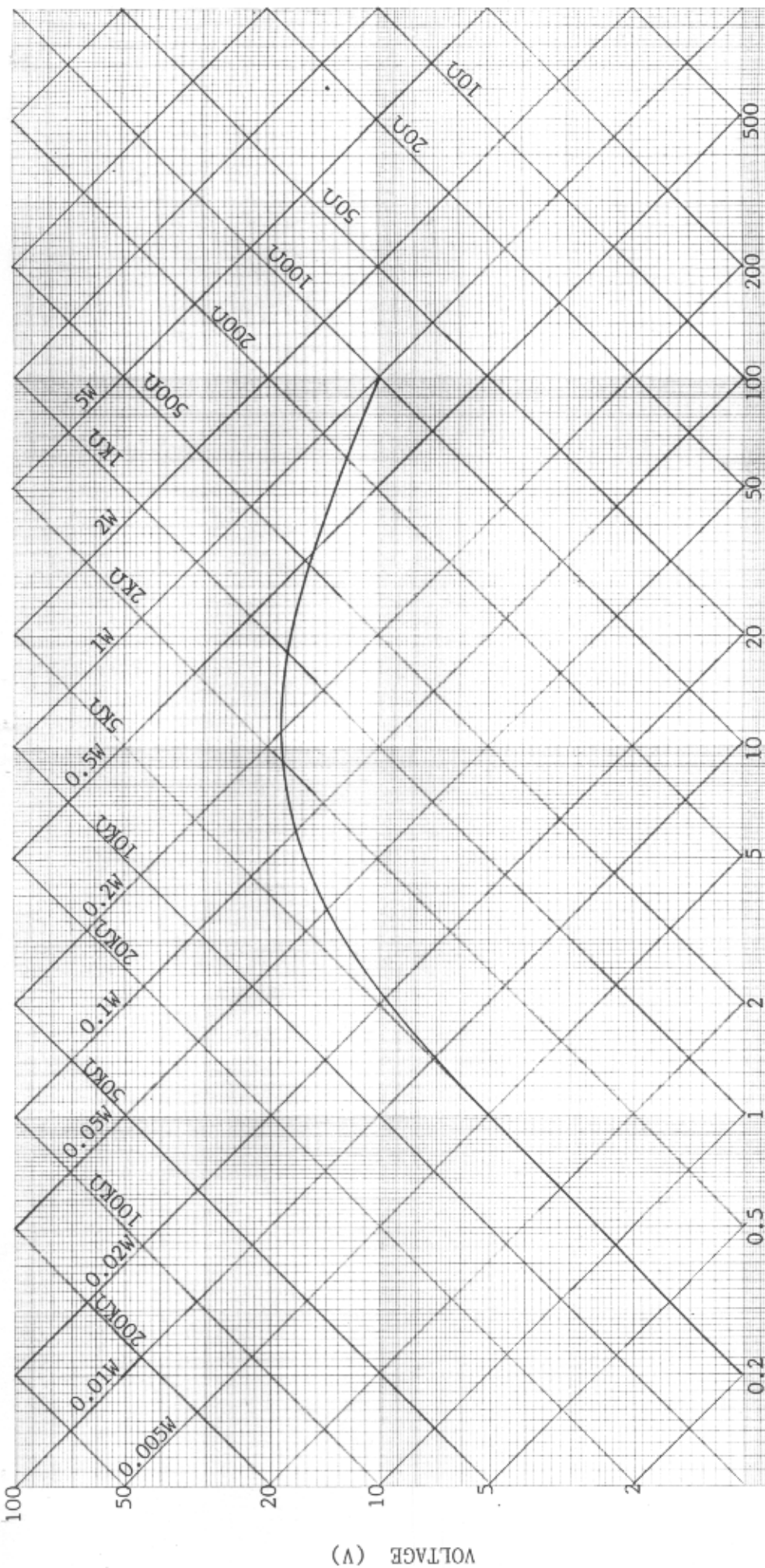
4-2 Leads Terminal Bend Strength

Conditions	Test Result	
Fixed body and hang 0.3 kg on one terminal bend 90° then back , again in opposite .	No break out and damage	OK

5. Reliability Test

Item	Test Conditions	Variable
Temp. cycle test	$-40^{\circ}\text{C} \times 30 \rightarrow +25^{\circ}\text{C} \times 5$ $+160^{\circ}\text{C} \times 30 \rightarrow +25^{\circ}\text{C} \times 5$ } $\times 10$	Within $\pm 10\%$
Humidity test	$45^{\circ}\text{C} \ 95\% \text{ RH} \times 1000 \text{ HR}$	Within $\pm 10\%$
Life test	$30 \text{ mAmp.} \times 1000\text{HR}$	Within $\pm 10\%$
Insulation test	DC 1000 V	ABOVE : 500 MOHM





CURRENT (mA)

V-I CHARACTERISTIC CURVE
FOR TTC-502

VOLTAGE (V)